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# Employer pensions and the wealth of Canadian families

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.. not available for a specific reference period
... not applicable
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$0^s$ value rounded to 0 (zero) where there is a meaningful distinction between true zero and the value that was rounded
$^p$ preliminary
$^r$ revised
x suppressed to meet the confidentiality requirements of the *Statistics Act*
$^E$ use with caution
F too unreliable to be published
$^*$ significantly different from reference category ($p < 0.05$)

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# Employer pensions and the wealth of Canadian families

*by Derek Messacar and René Morissette*

### Overview of the study

This study compares the wealth holdings of family units covered by workplace pension plans with those of other family units. It focuses on families and unattached individuals who had no significant business equity and whose major income recipient was aged 30 to 54 and employed as a paid worker. The paper also examines whether wealth differences observed between families with registered pension plan (RPP) assets and other families persist when key sociodemographic differences between the two populations are taken into account.

- Excluding pension assets, family units with RPP assets had a median net worth of $210,600 in 2012. This compared with a median net worth of $64,000 among family units without RPP assets.
- Family units with RPP assets were more likely than others to have characteristics that are conducive to wealth accumulation, such as higher incomes, higher levels of educational attainment and longer job tenure, among others.
- In 2012, families with RPP assets were more likely to hold other types of assets than families with no RPP assets, including real estate equity (82% versus 56%), investments or RRSPs/LIRAs (79% versus 55%), or vehicles (91% versus 76%).
- After accounting for differences in factors such as income and other characteristics, families with RPP assets were still more likely to hold investments or RRSPs/LIRAs than families with no RPP assets (by a margin of 8 percentage points instead of 24).
- In 2012, differences in income and other observable characteristics between the two types of families accounted for approximately four-tenths of their difference in median net worth, and approximately one half of their difference in average net worth.

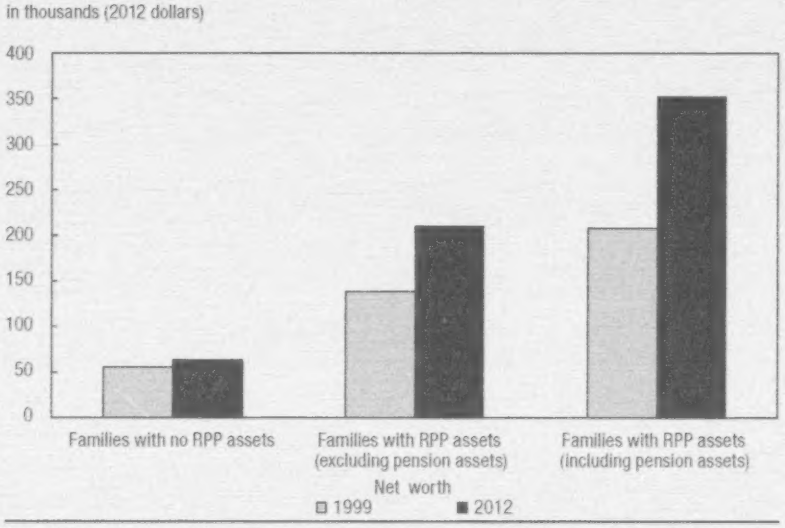
## Introduction

For most Canadians, the accumulation of private wealth during working years is a requisite for maintaining a comfortable standard of living in retirement. For many Canadians, employer-sponsored registered pension plans (RPPs) have been an important part of this process. Yet changes in the economic landscape over the past several decades have prompted some employers to move away from offering workplace pensions.[1]

A key question in this regard is whether families who are not covered by RPPs accumulate as much wealth as their counterparts who belong to such plans. It may be that RPP members benefit directly from collecting employer pension contributions and, as a result, are able to amass greater private wealth than non-members. The lock-in provision of RPPs—the fact that money invested in these plans cannot usually be withdrawn before retirement—may also facilitate savings to the extent that it acts as a commitment savings device. In contrast, non-members may compensate for the lack of workplace savings by accumulating more wealth in other retirement accounts, stocks and bonds, or real estate equity than RPP members, which results in both groups having comparable replacement incomes in retirement irrespective of their pension coverage. Previous research on the extent to which workplace pensions raise net wealth or induce workers to reduce savings in other accounts has yielded mixed results. Some studies find that workplace pensions increase private savings,[2] while others find these plans simply redistribute wealth across accounts.[3]

In order to provide new insights into this issue, this study compares the wealth holdings of families who are covered (or have been covered) by workplace pension plans with those of other families. Using the 1999 and 2012 waves of the Survey of Financial Security (SFS), the study focuses on families and unattached individuals who have no significant business equity (less than $1,000) and whose major income recipient is aged 30 to 54 and is employed as a paid worker (See *Data sources, methods and definitions*). Within this population, the study investigates the sources of the wealth differences between family units with RPP assets—those in which at least one person reports being a current or past RPP member—and those with no RPP assets[4]. Since the majority of families and unattached individuals with RPP assets are covered by defined benefit (DB) pension plans, a comparison of the wealth holdings of DB members with those of RPP non-members is also provided.[5] Throughout the article, wealth and income numbers are expressed in 2012 dollars using the Consumer Price Index (All Items) as a deflator.

**Chart 1**
**Median net worth, families with and without RPP assets, 1999 and 2012**




**Notes:** Includes family units where the major income recipient is aged 30 to 54 and employed as a paid worker. Family units with business equity of $1,000 or more (in 2012 dollars) are excluded.
**Source:** Statistics Canada, Survey of Financial Security, 1999 and 2012.

## Wealth in families with and without RPP assets

Irrespective of whether their pension assets are included, family units with RPP assets displayed greater wealth holdings than those without RPP assets (Chart 1). Excluding their pension assets, family units with RPP assets had a median net worth of $210,600 in 2012, more than three times the median net worth of $64,000 of other family units. Wealth differences between the two groups were significantly greater when pension assets were included. The median net worth in 2012 of families with RPP assets then rises to roughly $350,000. Although qualitatively similar patterns were observed in 1999, the wealth differences between the two groups were larger in 2012.

Wealth differences across the two types of families remain when families with RPP assets are classified according to whether their major income recipient has a defined benefit (DB) plan, a defined contribution plan or other type of plan, or was not covered by a pension plan at the time of survey collection (Table 1).[6] For instance, family units where the major income recipient had a defined benefit plan in 2012 had a median wealth of $381,200, or roughly $100,000 more than the median wealth of families whose major income recipient had a defined contribution plan or another type of plan. Of all DB members, those employed in public administration, education, health care and social assistance had the highest median net worth ($473,400).[7]

## Accounting for differences in the characteristics of families with and without RPP assets

In an accounting sense, families with RPP assets may have greater wealth than families without RPP assets for two reasons. They may have a greater propensity to hold certain assets and, when holding a specific asset, the value of this particular asset may be greater. These differences might in turn arise—at least partly—because the two groups differ in terms of characteristics conducive to wealth accumulation such as education, family structure, income, and tenure with their employer.[8]

**Table 1**
**Median net worth, families with and without RPP assets, 1999 and 2012**

| | Median net worth | | Share of family units | |
|---|---|---|---|---|
| | 1999 | 2012 | 1999 | 2012 |
| | 2012 dollars | | percentage | |
| **Family units with no RPP assets** | **55,413** | **64,000** | **39.1** | **38.7** |
| **Family units with RPP assets** | **208,225** | **353,140** | **60.9** | **61.3** |
| **Major income recipient has** | | | | |
| A defined benefit plan | 221,718 | 381,160 | 44.8 | 38.3 |
| A defined benefit plan outside public administration, education, health care and social assistance | 212,215 | 292,989 | 26.0 | 17.9 |
| A defined benefit plan in public administration, education, health care and social assistance | 236,665 | 473,394 | 18.8 | 20.4 |
| A defined contribution plan or other type | 184,313 | 288,244 | 6.9 | 12.3 |
| No RPPs[1] | 159,790 | 341,082 | 9.2 | 10.7 |

RPP: registered pension plan

1. These families have RPP assets even though their main income earner is not covered by a RPP. This can be the case when another family member is covered by a pension plan, or if any member of the family was covered by a pension plan in the past.

**Notes:** Includes family units where the major income recipient is aged 30 to 54 and employed as a paid worker. Family units with business equity of $1,000 or more (in 2012 dollars) are excluded.

**Source:** Statistics Canada, Survey of Financial Security, 1999 and 2012.

**Table 2**
**Descriptive statistics, families with and without RPP assets, 1999 and 2012**

| | 1999 | | | 2012 | | |
|---|---|---|---|---|---|---|
| | Family units with RPP assets | | | | | |
| | No | Yes | Yes DB plan | No | Yes | Yes DB plan |
| | age | | | | | |
| **Average age of major income recipient** | **40.2** | **41.8** | **42.2** | **41.1** | **42.8** | **42.6** |
| | percentage | | | | | |
| Percentage of major income recipients who | | | | | | |
| Have a high school education or less | 40.9 | 27.1 | 26.6 | 38.4 | 24.2 | 20.6 |
| Have a bachelor's degree or more | 16.4 | 26.6 | 27.8 | 25.3 | 36.7 | 39.4 |
| Are Canadian-born | 71.8 | 82.4 | 83.3 | 69.6 | 81.0 | 83.7 |
| Are unionized | 14.6 | 55.6 | 67.3 | 11.5 | 48.6 | 65.6 |
| Have 10 years of tenure or more with their employer | 21.3 | 51.0 | 59.7 | 19.0 | 41.7 | 43.6 |
| Are employed in public administration, education, health care and social assistance | 10.2 | 34.2 | 42.0 | 13.0 | 36.9 | 53.2 |
| Are in a couple | 55.7 | 72.8 | 70.7 | 53.4 | 69.1 | 66.3 |
| | 2012 dollars | | | | | |
| **After-tax family income** | | | | | | |
| Average | 48,946 | 74,513 | 73,536 | 60,092 | 91,064 | 88,880 |
| Median | 43,031 | 69,297 | 68,624 | 51,644 | 82,579 | 81,866 |
| | number | | | | | |
| Average family size | 2.8 | 3.1 | 3.0 | 2.6 | 3.1 | 3.0 |
| | dollars | | | | | |
| Median net worth | 55,413 | 208,225 | 221,718 | 64,000 | 353,140 | 381,160 |
| | number | | | | | |
| Sample size | 2,048 | 3,370 | 2,437 | 1,228 | 2,346 | 1,478 |

RPP: registered pension plan
DB: defined benefit

**Notes:** Includes family units where the major income recipient is aged 30 to 54 and employed as a paid worker. Family units with business equity of $1,000 or more (in 2012 dollars) are excluded.

**Source:** Statistics Canada, Survey of Financial Security, 1999 and 2012.

This issue can be examined by comparing the characteristics of the two groups of family units. First, major income recipients in families with RPP assets were slightly older than those in other families (Table 2). Furthermore, those in families with RPP assets were more educated; more likely to be born in Canada and be in couples; more often unionized or employed in public administration, education, health care and social assistance; and had longer job tenure than their counterparts in families with no RPP assets.

For instance, more than one-third of major income recipients in families with RPP assets had a bachelor's degree or more education in 2012. The corresponding proportion for their counterparts in other families was 25%. About 40% of major income recipients living in families with RPP assets had been with their employer for 10 years or more in 2012—twice the proportion observed among other major income recipients. Families with RPP assets also displayed higher income levels and were thus better-positioned to accumulate wealth through their savings than non-RPP families. To sum up, families with RPP assets differed from other families in several aspects, which may affect their annual savings and thereby their ability accumulate wealth. These findings will be taken into account below in multivariate analyses.

Families with and without RPP assets also differed in their propensity to hold various types of assets. Both in 1999 and 2012, families with RPPs were significantly more likely (by at least 25 percentage points) to hold registered retirement savings plans / locked-in-retirement accounts (RRSPs/LIRAs) or principal residence equity (Table 3). Families with RPP assets also held other

**Table 3**
**Percentage of family units holding assets or debt, families with and without RPP assets, 1999 and 2012**

| | 1999 | | | 2012 | | |
|---|---|---|---|---|---|---|
| | Family units with RPP assets | | | | | |
| | No | Yes | Yes DB plan | No | Yes | Yes DB plan |
| | percentage | | | | | |
| **Assets** | | | | | | |
| Deposits | 84.5 | 91.0 | 91.0 | 92.1 | 92.7 | 92.2 |
| Investments | 20.2 | 41.3 | 42.4 | 16.2 | 28.8 | 28.1 |
| RRSPs/LIRAs | 55.7 | 81.1 | 81.9 | 50.7 | 75.3 | 73.7 |
| Investments or RRSPs/LIRAs | 58.8 | 85.0 | 86.0 | 55.3 | 78.7 | 77.9 |
| Principal residence | 50.8 | 76.9 | 77.7 | 50.5 | 79.0 | 78.6 |
| Other real estate | 12.3 | 17.0 | 17.2 | 14.3 | 19.6 | 20.1 |
| Principal residence or other real estate | 55.4 | 79.5 | 80.6 | 56.0 | 82.0 | 82.2 |
| Vehicles | 77.4 | 90.9 | 90.4 | 76.2 | 91.2 | 90.1 |
| RPP assets | ... | 100.0 | 100.0 | ... | 100.0 | 100.0 |
| Other assets | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| **Debts** | | | | | | |
| Mortgage on principal residence | 38.6 | 57.2 | 57.0 | [illegible]0.5 | 60.7 | 60.9 |
| Other debt | 71.0 | 77.9 | 77.5 | [illegible]7 | 80.9 | 82.6 |

... not applicable
RPP: registered pension plan
DB: defined benefit
RRSP: registered retirement savings plan
LIRA: locked-in retirement account
**Notes:** Includes family units where the major income recipient is aged 30 to 54 and employed as a paid worker. Family units with business equity of $1,000 or more (in 2012 dollars) are excluded.
**Source:** Statistics Canada, Survey of Financial Security, 1999 and 2012.

types of assets more often, albeit to a relatively small extent in the case of assets held by the vast majority of families (e.g., deposits).

For example, 82% of families with RPP assets had a principal residence or other real estate in 2012, compared with 56% for other families. Families with RPP assets were also more likely to hold investments or RRSPs/LIRAs (79%, compared with versus 55% among families with no RPP assets) and vehicles (91% versus 76%). On the debt side, RPP families were also more likely to hold mortgage debt (61% versus 40%) or other debt (81% versus 74%).

Differences in average asset values by RPP membership can also be examined for each category of assets. Doing so focuses the analysis on family units that have elicited some particular forms of assets since those who do not hold the corresponding category of assets are excluded from the calculations.

The results without controls indicate that for every category of assets, the average amount held by RPP families was larger than non-RPP families, both in 1999 and in 2012 (Table 4).

Hence, families with RPP assets who had financial investments (e.g., stocks and bonds) or RRSPs held, on average, roughly $32,000 more such assets than other families in 2012. Families with RPPs who had a principal residence or other real estate averaged roughly $27,000 more in net equity on real estate than non-members in 1999, and about $30,000 more in 2012.

To sum up, families with RPPs tended to hold broadly defined assets more often than other families, and, when they held such assets, they averaged greater amounts than those held by their counterparts with no RPPs in every asset category (Chart 2).[9] The same conclusion applied to families covered by defined benefit plans.

The next step is to investigate the degree to which these differences in wealth are explained by differences in families' observable characteristics. This can be done by using multivariate analyses that control for a number of factors, including: after-tax family income, family size, marital status, and region of residence, as well as the age, gender, education level, immigration status, union status, sector of employment, and job tenure of the major income recipient.[10]

While differences in income between RPP and non-RPP families are expected to be the largest determinant of the wealth disparity, other factors may also help to explain differences in savings behaviour between the two types of families. For example, some individuals may be more likely to be union members out of a preference for non-wage benefits, including pensions. In addition, jointly controlling for earnings, education and tenure acts as a reasonable proxy for permanent income, a concept that better captures families' ability to save than current income.[11]

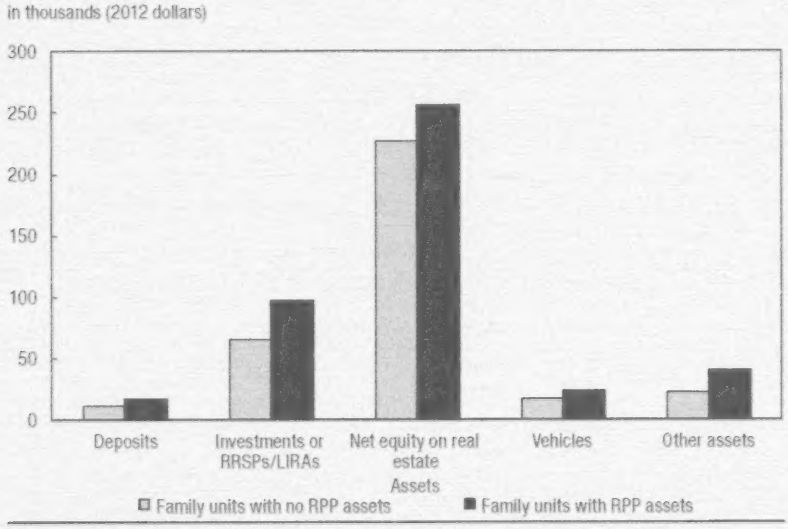
In the absence of controls to account for such differences, RPP families were at least 25 percentage points more likely than non-RPP families to hold RRSPs/LIRAs or a principal residence in both 1999 and 2012. This difference, however, became smaller when differences in family income and other covariates between the two groups were taken into account (Table 5). Specifically, when controls were added for family income and other

**Table 4**
**Differences in average asset values between families with RPP assets and those with no RPP assets, 1999 and 2012**

| | 1999 | | | 2012 | | |
|---|---|---|---|---|---|---|
| | Control variables | | | | | |
| | No controls | Family income | Family income and others | No controls | Family income | Family income and others |
| | dollars | | | | | |
| **Differences between family units with RPP assets and those with no RPP assets** | | | | | | |
| Deposits | 3,398 | -653* | -1,703* | 6,225 | 545* | -661* |
| Investments or RRSPs/LIRAS | 11,317* | -5,439* | -13,127* | 32,268 | -3,007* | 1,295* |
| Net equity from real estate | 26,814 | 1,275* | 2,974* | 29,646* | -24,142* | -4,709* |
| Vehicles | 6,567 | 2,373 | 1,528 | 7,483 | 2,168 | 2,336 |
| Other assets | 10,645 | 2,769 | 1,134* | 17,784 | 4,881 | 4,311* |
| **Differences between family units whose major income recipient has a DB plan and those with no RPP assets** | | | | | | |
| Deposits | 3,602 | -88* | -1,755* | 6,475 | 1,354* | 1,149* |
| Investments or RRSPs/LIRAS | 9,140* | -3,441* | -14,578* | 19,423 | -9,513* | 922* |
| Net equity on real estate | 26,526 | 3,944* | 6,110* | 13,455* | -33,183 | -15,624* |
| Vehicles | 6,714 | 2,709 | 1,851 | 7,167 | 2,246 | 2,660 |
| Other assets | 10,848 | 3,833* | 2,218* | 17,147 | 5,168 | 7,563 |

* not statistically significant at the 5% level
RPP: registered pension plan
DB: defined benefit
RRSP: registered retirement savings plan
LIRA: locked-in retirement account
**Notes:** Includes family units where the major income recipient is aged 30 to 54 and employed as a paid worker. Family units with business equity of $1,000 or more (in 2012 dollars) are excluded.
**Source:** Statistics Canada, Survey of Financial Security, 1999 and 2012.

**Chart 2**
**Average asset values, families with and without RPP assets, 2012**




**Notes:** Includes family units where the major income recipient is aged 30 to 54 and employed as a paid worker. Family units with business equity of $1,000 or more (in 2012 dollars) are excluded.
**Source:** Statistics Canada, Survey of Financial Security, 2012.

characteristics, family units with RPP assets were about 10 percentage points more likely to have a principal residence than their counterparts with no RPP assets in 2012 (instead of 29 percentage points). Similar patterns were also observed for other categories of assets and debt.

Interestingly, controlling for only income yields almost the same effect as the full vector of control variables—implying that differences in family income are a major factor underlying the wealth differences between the two groups. This is expected, since employment income is a common resource for accumulating private wealth.

Nevertheless, controlling for observable characteristics does not fully explain differences in the propensity to hold investments or RRSPs/LIRAs or principal residence equity. After the inclusion of income and other observable characteristics, RPP families were still roughly eight percentage points more likely (in both 1999 and 2012) to hold investments or RRSPs/LIRAs than non-RPP families (see third and sixth columns of Table 5). Thus, significant differences in portfolio allocation between the two family types remained even after controlling for income and other characteristics. This suggests that families with and without RPPs either differ intrinsically in terms of saving behaviour, or end up having a different portfolio allocation because of the impact of workplace pension plans.

In contrast, differences in average *amounts* held in specific type of assets (among those who hold these types of assets) were mainly explained by income differences. For instance, families with RPP assets held, on average, $32,000 more assets in investments or RRSPs/LIRAs than

**Table 5**
**Percentage-point differences between families with RPP assets and those with no RPP assets in the propensity to hold specific assets or debts, 1999 and 2012**

| | 1999 | | | 2012 | | |
|---|---|---|---|---|---|---|
| | Control variables | | | | | |
| | No controls | Family income | Family income and others | No controls | Family income | Family income and others |
| | percentage point | | | | | |
| **Differences between family units with RPP assets and those with no RPP assets** | | | | | | |
| **Assets** | | | | | | |
| Deposits | 6.5 | 4.4 | 3.8 | 0.6* | -0.5* | -1.5* |
| Investments | 21.1 | 12.7 | 9.4 | 12.6 | 5.8 | 3.9* |
| RRSPs/LIRAs | 25.4 | 11.0 | 6.6 | 24.5 | 10.5 | 8.5 |
| Investments or RRSPs/LIRAs | 26.2 | 1.7 | 7.6 | 23.5 | 10.5 | 7.9 |
| Principal residence | 26.0 | 10.2 | 6.0 | 28.5 | 10.6 | 9.6 |
| Other real estate | 4.7 | 1.5* | -0.4* | 5.3 | -1.3* | -0.3* |
| Principal residence/other real estate | 24.2 | 9.1 | 5.2 | 26.0 | 9.8 | 7.8 |
| Vehicles | 13.5 | 4.9 | 3.7 | 15.0 | 6.3 | 7.6 |
| **Debts** | | | | | | |
| Mortgage on principal residence | 18.6 | 7.0 | 5.9 | 21.2 | 8.5 | 9.6 |
| Other debt | 6.9 | 3.8 | 3.8 | 7.2 | 4.9 | 4.7 |
| **Differences between family units whose major income recipient has a DB plan and those with no RPP assets** | | | | | | |
| **Assets** | | | | | | |
| Deposits | 6.5 | 4.3 | 3.6 | 0.1* | -1.3 | -3.7* |
| Investments | 22.2 | 14.1 | 11.6 | 11.9 | 6.0 | 3.4* |
| RRSPs/LIRAs | 26.2 | 12.0 | 7.0 | 23.0 | 9.3 | 7.1 |
| Investments or RRSPs/LIRAs | 27.2 | 14.0 | 8.4 | 22.7 | 10.2 | 6.7 |
| Principal residence | 26.9 | 11.1 | 5.2 | 28.1 | 10.3 | 10.8 |
| Other real estate | 5.0 | 2.1* | -0.4* | 5.8 | 2.2* | 2.5* |
| Principal residence/other real estate | 25.2 | 10.4 | 5.1 | 26.2 | 10.2 | 10.0 |
| Vehicles | 12.9 | 4.1 | 2.4* | 13.9 | 4.6* | 7.5 |
| **Debts** | | | | | | |
| Mortgage on principal residence | 18.5 | 7.0 | 5.2 | 21.4 | 8.4 | 10.7 |
| Other debt | 6.5 | 3.5* | 3.3* | 9.0 | 7.2 | 8.7 |

* not statistically significant at the 5% level
RPP: registered pension plan
DB: defined benefit
RRSP: registered retirement savings plan
LIRA: locked-in retirement account
**Notes:** Includes family units where the major income recipient is aged 30 to 54 and employed as a paid worker. Family units with business equity of $1,000 or more (in 2012 dollars) are excluded.
**Source:** Statistics Canada, Survey of Financial Security, 1999 and 2012.

their non-RPP counterparts in 2012; however, this difference became negative and no longer statistically significant after income differences were taken into account (see the fourth and fifth column of Table 4). Differences in net equity in real estate observed between the two groups in 2012 also became negative once income differences were taken into account. Similar results were found when comparing members of defined benefit plans with non-RPP members.

Together, the results of tables 3 to 5 indicate that the differences in family income and other characteristics conducive to wealth accumulation observed between families with and without RPPs accounted for differences in the average value of specific asset types (conditioning on holding these assets) to a greater degree than they accounted for differences in their propensity to hold specific assets. This raises the following question: To what extent do such differences in family income and other characteristics account for the differences in median and average wealth observed between the two groups? Wealth, or net worth, is defined as the overall value of assets, minus the total amount of debt held by the family.

## Assessing the potential role of employer sponsorship

Although RPP membership may directly help families to overcome the costs and challenges associated with retirement planning, it is conceivable that workers who have greater predispositions for saving join firms based on pension coverage, or that firms choose to offer pensions based on the demands of their workers.[12] While these potentially greater dispositions for saving and the aforementioned workers' demands cannot be observed in the data used in this article, it is possible to compute estimates of median and average wealth for the two groups that remove the effect of differences in family characteristics (such as income).

An ideal experiment to assess the potential impact of employer sponsorship on wealth formation would randomly assign family units into RPP coverage to assess its effect on net worth. In the absence of such an experiment, the approach used here is to ask: What would be the

median and average wealth of family units with no RPP assets if their income and other characteristics were identical to those with RPP assets?

To answer this question, a decomposition method based on a re-weighting procedure is applied to family units with no RPP assets (Table 6).[13] The first two columns of Table 6 replicate the median net worth (or wealth) values shown in Table 1 (in addition to providing average net worth values). Table 6 indicates, for example, that the average net worth of family units with RPP assets was about $536,000 in 2012, compared with $191,000 for families with no RPPs.

The third column of Table 6 estimates the median and average wealth that families with no RPPs would have if their characteristics were the same as families with RPPs. Under this hypothetical scenario, family units with no RPPs would have an estimated average net worth of about $359,000. This finding means that about one-half of the difference in average wealth between the two groups can be accounted for by differences in income and other characteristics.[14] This suggests that employer sponsorship is still associated with greater wealth accumulation, but the magnitude of the effect is not as pronounced as the raw wealth comparisons would indicate. The explained portion was lower in the case of the median— about four-tenths of the difference in median net worth between the two groups can be accounted for by differences in income and other characteristics. These results are consistent with recent Canadian research[15] that finds RPP contributions partially increase total savings, by approximately $0.50 per $1, but that some crowd-out between RPPs and RRSPs still occurs.

**Table 6**
**Actual and adjusted values for net worth, families with and without RPP assets, 1999 and 2012**

| | Actual data | | Re-weighted data | Proportion of the difference explained |
|---|---|---|---|---|
| Family unit with RPP assets | No | Yes | No | |
| | 2012 dollars | | | percentage |
| **1999** | | | | |
| Median net worth | 55,413 | 208,225 | 131,263 | 49.6 |
| Average net worth | 122,097 | 300,416 | 222,078 | 56.1 |
| **2012** | | | | |
| Median net worth | 64,000 | 353,140 | 177,500 | 39.3 |
| Average net worth | 190,926 | 535,564 | 358,885 | 48.7 |

RPP: registered pension plan
**Notes:** Includes family units where the major income recipient is aged 30 to 54 and employed as a paid worker. Family units with business equity of $1,000 or more (in 2012 dollars) are excluded. The third column shows wealth estimates obtained after re-weighting the sample of family units with no RPP assets based on the characteristics of those with RPP assets.
**Source:** Statistics Canada, Survey of Financial Security, 1999 and 2012.

**Table 7**
**Actual and adjusted values for net worth, families with DB plans and families without RPP assets, 1999 and 2012**

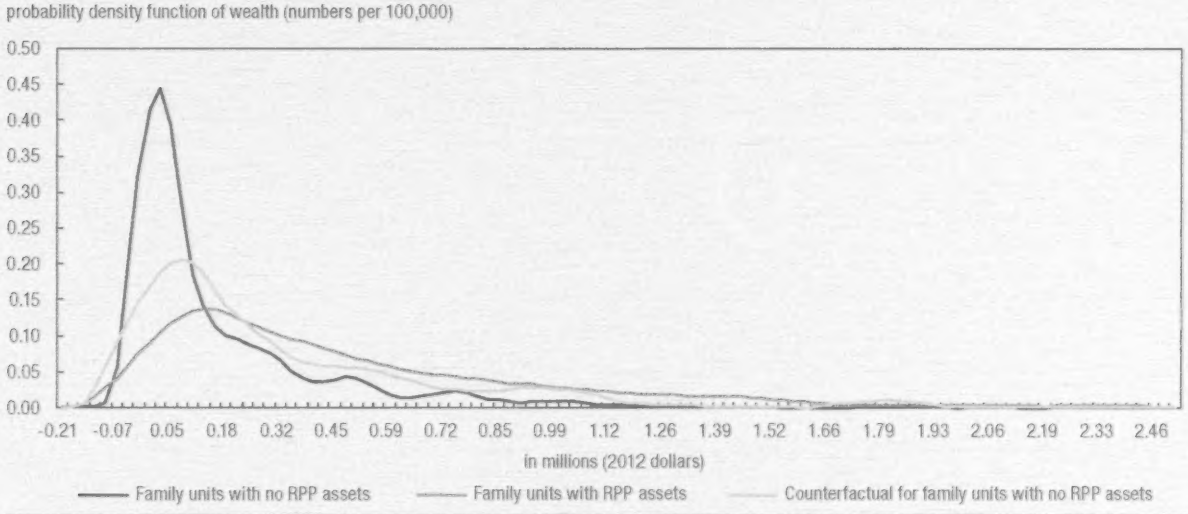
| | Actual data | | Re-weighted data | Proportion of the difference explained |
|---|---|---|---|---|
| Family unit with RPP assets | No | Yes DB plan | No | |
| | 2012 dollars | | | percentage |
| **1999** | | | | |
| Median net worth | 55,413 | 221,718 | 144,101 | 53.3 |
| Average net worth | 122,097 | 310,073 | 235,372 | 60.3 |
| **2012** | | | | |
| Median net worth | 64,000 | 381,160 | 165,100 | 31.9 |
| Average net worth | 190,926 | 559,237 | 295,522 | 28.4 |

RPP: registered pension plan
DB: defined benefit
**Notes:** Includes family units where the major income recipient is aged 30 to 54 and employed as a paid worker. Family units with business equity of $1,000 or more (in 2012 dollars) are excluded. The third column shows wealth estimates obtained after re-weighting the sample of family units with no RPP assets based on the characteristics of those where the major income recipient has a defined benefit (DB) plan.
**Source:** Statistics Canada, Survey of Financial Security, 1999 and 2012.

As well, significant wealth differences remained between families of DB plan members and families with no RPPs, even after the effect of differences in family income and other characteristics were taken into account (Table 7). Hence, in the case of both RPP families and families with DB plans, wealth remained significantly higher than non-RPP families, even across observationally equivalent families.

Another way to examine the effect of income and other characteristics on wealth accumulation is to examine the density function of wealth, which indicates the extent to which families are concentrated across the wealth distribution. Families with no RPPs, for example, had a relatively large degree of concentration around $30,000; families with RPP assets, in contrast, were more evenly spread across the distribution, with a certain

**Chart 3**
**Probability density function of net worth, families with and without RPP assets, 2012**




**Notes:** Includes family units where the major income recipient is aged 30 to 54 and employed as a paid worker. Family units with business equity of $1,000 or more (in 2012 dollars) are excluded. The counterfactual density assumes that family units with no RPP assets have the same socioeconomic characteristics as family units with RPP assets.
**Source:** Statistics Canada, Survey of Financial Security, 2012.

degree of concentration occurring around $190,000 (Chart 3). If, however, families with no RPP assets had the same socioeconomic characteristics as families with RPP assets, they would have a density function that would move closer to that of families with RPP assets, but this would not entirely remove the differences between the two types of families. This supports the fact that socioeconomic differences explain a good deal of differences in wealth between families with and without RPPs, but do not explain them all.

## Conclusion

This paper investigated the potential role of employer sponsored pensions in the wealth accumulation process of working-aged Canadians with no significant business equity, by comparing the wealth of families with registered pension plan (RPP) assets with that of other families. The analysis first showed that family units with RPP assets had significantly more wealth than other families in both 1999 and 2012, even after excluding pension assets from the calculations. The propensity to hold assets was also higher for RPP families for all types of assets, including RRSPs/LIRAs.

A closer inspection showed that part of the reason for such behaviour is due to differences in observable factors, notably family income. However, even after controlling for differences in observable factors, families covered by registered pension plans still displayed higher wealth holdings than their counterparts who were not covered by such plans. Thus, a significant fraction of RPP contributions still pass through into greater wealth for reasons that cannot be explained in the data. Whether this finding reflects the causal impact of workplace pension plans on wealth accumulation or intrinsically different savings behaviour from RPP members and non-members remains to be determined. Nevertheless, this finding informs discussions regarding how changes in the availability of workplace pensions, both in Canada and internationally, may impact private wealth accumulation.

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## Data sources, methods and definitions

### Data source

In this study, data from the 1999 and 2012 Survey of Financial Security (SFS) are used. The SFS is a voluntary survey that collects information from a sample of Canadian families on their assets, debts, employment, income and education. Information is collected on the value of all major financial and non-financial assets and on the money owing on mortgages, vehicles, credit cards, student loans and other debts.

This study focuses on family units with no significant business equity and whose major income recipient was aged 30 to 54 and employed as a paid worker at the time of survey collection. Because the wealth accumulation process for self-employed individuals likely differs from that other families (for example, unincorporated self-employed individuals not at risk of being covered by an RPP), families with significant business equity were excluded from the calculations. Families with significant business equity are defined as those with at least $1,000 of business equity in 2012 dollars. Of all family units with less than $1,000 of business equity, the vast majority (roughly 90%) had no business equity. Of the remaining 10 %, at least 4 in 5 family units had negligible business equity.

### Definitions

**Net worth:** Total value of assets, minus the total value of debt, or liabilities, held by family units. The value of net worth is generally understood to be the most common definition of the wealth of a family.

**RPP assets:** Assets corresponding to the present value of savings in registered pension plans (RPPs). These assets can be the result of past savings. As a result, those who have RPP assets were not necessarily contributing to a pension plan at the time of survey collection.

**Registered pension plan (RPP):** A plan the employer establishes to provide a pension to retiring employees. Regular employer contributions finance retirement benefits, and, in many cases, so do employee contributions and investment income resulting from these contributions.

**Defined benefit (DB) plan:** An RPP under which benefits correspond to a set amount or are determined with a formula providing a pension unit for each year of service.

Other types of plans include **defined contribution plans** (DC plans), which are RPPs to which the value of accumulated contributions is applied upon employee retirement to provide pension income, and **hybrid or mixed plans** (H/M plans), which provide the best of a defined benefit and a defined contribution option. Mixed plans provide income from both defined benefit and defined contribution portions. In hybrid plans, some degree of risk is shared between the employer and employees.

## Notes

1. See Morissette and Ostrovsky (2007) and Horner (2011).
2. See Poterba et al. (1994, 1995); Gelber (2011); Chetty et al. (forthcoming).
3. See Benjamin (2003); Engelhardt and Kumar (2011).
4. In both 1999 and 2012, families with RPP assets represented 61% of overall families and those without RPP assets represented 39% of families.
5. While detailed comparisons of the wealth holdings of families covered by defined contribution plans (or other types of RPPs) with those of families with no RPP assets would be desirable, sample size limitations preclude meaningful multivariate analyses needed to support such comparisons. Detailed comparisons of the wealth holdings of DB plan members by sector of employment (private versus public sector) are also ruled out for the same reason.
6. Families may have RPP assets even if their major income recipient does not have RPP coverage. This could occur if the spouse of the major income recipient or some other family member were a current or past RPP member.
7. Of all families with RPP assets, those whose major income recipient had a defined benefit plan in public administration, education, health care and social assistance experienced the greatest increase in median net worth from 1999 to 2012. While a detailed analysis of the factors underlying this growth in median wealth is beyond the scope of the article, the fact that the majority of public sector plan members receive a benefit based on 2% of their earnings, combined with the use of a lower discount rate to value pension wealth in 2012, likely contributed to this increase. Furthermore, other members of defined benefit plans tend to have less generous benefit formulas (Statistics Canada 2003, p. 61) and experienced a smaller increase in median net worth over the same period.

8. In defined benefit pension plans where benefits received depend partly on the number of years of service with the employer as well as on employment income, higher levels of tenure with one's employer will, all else equal, lead to higher pension wealth.

9. Families with RPP assets also have greater median amounts of these assets.

10. The set of covariates include family size, five indicators of after-tax family income, seven region indicators (Atlantic provinces, Quebec, Manitoba, Saskatchewan, Alberta and British Columbia; and Ontario), a quadratic term for the age of the major income recipient, three education level indicators, two immigrant status indicators (recent versus older immigrants), three tenure indicators, and binary variables indicating if the major income recipient was female, unionized, living in a couple and employed in public administration, education, health care or social assistance.

11. Current income sometimes reflects unusually good or bad years experienced in the labour market by the major income recipient (or his or her spouse) due to events such as the receipt of bonuses or the occurrence of job loss. When this happens, current income is not as good a metric to assess families' ability to accumulate wealth as permanent (or long-term average) income.

12. See Ippolito (1997).

13. This procedure was developed by Dinardo et al. (1996). Descriptive regression models of the probability of a family having RPP assets are estimated separately for each year and underlie the re-weighting procedure. The set of covariates used is identical to that defined in footnote 10.

14. This estimate equals the following ratio: [i.e. ($358,885 – $190,925) / ($535,564 – $190,926)].

15. See Messacar (forthcoming).

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